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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,567	08/31/2001	Ryusuke Kawate	213026US2	7591
22850	7590	07/01/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	6

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,567

Applicant(s)

KAWATE ET AL.

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 & 3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 and 3, a single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. See in Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) and see MPEP 2173.05(p) section II.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 2-6 are rejected under 35 U.S.C. 101 based on the theory that the claims is directed to neither a "process" nor a "machine" but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* At 1551.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klink (US Patent No. 5,706,277) in view of Touma et al (US Patent No. 6,288,809).

Regarding claim 1, referring to Figures 1 and 2, Klink discloses an optical distribution network system comprising:

an optical line termination (i.e., multiplexer 11, transmitter 14, receiver 15, monitor 16, switch 13, demultiplexer 12, transmitter 18, receiver 19, Fig. 1);

an optical network unit (i.e., multiplexer 31, transmitter 34, receiver 35, monitor 36, switch 33, demultiplexer 32, transmitter 38, receiver 39, Fig. 1), which is connected to optical line termination through at least one of a first optical network and a second optical network (Fig. 1);

monitoring means (i.e., monitor 16, Fig. 1) installed in the optical line termination for detecting a system switching request from the optical network unit; and

control means (i.e., switch 13, Fig. 1) installed in the optical line termination for controlling system switching between a working side and a standby side of the optical network unit (see from col. 4, line 39 through col. 7, line 30).

Klink differ from claim 1 in that he fails to teach a plurality of optical network units. However, Touma in US Patent No. 6,288,809 teaches a plurality of optical network units (Figs. 1 and 17, col. 4, lines 60-67, col. 5, lines 1-67 and col. 6, lines 1-60). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the plurality of optical network units as taught by Touma in the system of Klink. One of ordinary skill in the art would have been motivated to do this since Touma suggests in column 4, lines 60-67, col. 5, lines 1-67 and col. 6, lines 1-60 that using such a plurality of optical network units have advantage allowing distributing the signal from a central office to the user terminals.

Regarding claims 2 and 3, Klink further teaches the control means employs a tree switching method that carries out the system switching between the working side and the standby side of all of the plurality of optical network units at once, when carrying out the system switching of any one of the plurality of optical network units (Fig. 1).

Regarding claim 4, Klink further teaches when the monitoring means detects a system switching request sent from at least one of said plurality of optical network units, said control means makes a decision as to whether to carry out the system switching considering failure conditions of all of said plurality of optical network units (see from col. 4, line 39 through col. 7, line 30).

Regarding claims 5 and 6, it would have been obvious to obtain when carrying out the system switching of the working side of all of the plurality of optical network units to their standby side, the control means performs switching control only when a number of failed units on the standby side is less than a number of failed units on the working side in order to provide a reliable, high quality optical communication.

Regarding claim 7, the combination of Klink and Touma teaches wherein each of the plurality of optical network units further comprises switching means for carrying out the system switching between the working side and the standby side when it receives a system switching command from the optical line termination (Fig. 1 of Klink and Fig. 1 of Touma).

Regarding claim 8, the combination of Klink and Touma teaches the control means carries out the system switching only when a system switching request from one of the plurality of optical network units continues for more than a predetermined time period (Fig. 1 of Klink and Fig. 1 of Touma).

Regarding claim 9, the combination of Klink and Touma teaches the control means carries out its switching control in a duplex optical distribution network system on a passive optical network system (Fig. 1 of Klink and Fig. 1 of Touma).

Regarding claim 10, the combination of Klink and Touma teaches the optical line termination further comprises output selecting means for outputting one of upstream messages that are copied via the working side and the standby side by at least one of the plurality of optical network units, and wherein at least one of the plurality of optical network units further comprises output selecting means for outputting one of

downstream messages that are copied via the working side and the standby side by the optical line termination (Fig. 1 of Klink and Fig. 1 of Touma).

Regarding claim 11, the combination of Klink and Touma teaches at least one of the plurality of optical network units comprises transmission stop means for halting transmission of one of the upstream messages to be copied to the working side and standby side of the optical line termination (Fig. 1 of Klink and Fig. 1 of Touma).

Allowable Subject Matter

8. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kumozaki et al (US Patent No. 5,539,564) discloses point to multipoint optical transmission system.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

A handwritten signature in cursive script, appearing to read "Hanh Phan", is written over a horizontal line.

Hanh Phan

06/24/2004